

## WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:
  - a scanner section which reads an original image to output image data of various colors;
  - 5 a setting section which sets a compression rate of the image data outputted from said scanner section;
  - a compression section which compresses the image data outputted from said scanner section at the compression rate set by said setting section;
  - 10 a register section which registers the image data outputted from said compression section and the compression rate;
  - an expansion section which expands the image data registered in said register section on the basis of the compression rate corresponding to the image data;
  - 15 an image forming section which performs image formation with respect to the image data expanded in said expansion section on an image-formed medium;
  - reading means for reading in advance said original image by said scanner section;
  - 20 a determination section which determines whether or not a predetermined image quality can be obtained at the time of forming an image on said image-formed medium in said image forming section by a state of said original image read by said reading means and the compression rate set by said setting section; and
  - 25 an inform section which informs an operator that

the predetermined image quality cannot be obtained when said determination section determines that the predetermined image quality cannot be obtained.

5       2. The image forming apparatus according to claim 1 further comprising a changing means for changing the compression rate by using said setting section when said inform section informs that the predetermined image quality cannot be obtained.

10      3. The image forming apparatus according to claim 1, wherein the image data of various colors are red, green and blue image data and said image forming apparatus further comprising a color conversion section for converting said red, green and blue image data into yellow, magenta, cyan and black image data.

15      4. The image forming apparatus according to claim 3, wherein said image forming section comprises rotating photosensitive drums and image forming units for yellow, magenta, cyan and black which transfer yellow, magenta, cyan and black image data on an image-formed medium.

20      5. The image forming apparatus according to claim 1, wherein said reading means reads density variation on the original document.

25      6. The image forming apparatus according to claim 5, wherein said determination section determines whether or not an image of said original document is fine by the density variation on the original document

read by said reading means.

7. The image forming apparatus according to  
claim 1, wherein the compression rate is changed by  
said compression section changing an area (region) to  
5 be compressed.

8. The image forming apparatus according to  
claim 1, wherein said scanner section comprises an  
image reading section which reads a color original  
document to output image data subjected to color  
10 separation into red, green and blue, and a color  
conversion section which converts the color-separated  
image data outputted from said image reading section  
into yellow, magenta, cyan and black image data.

9. The image forming apparatus according to  
15 claim 1, wherein said register section registers the  
image data and its compression rate in separate  
mediums.

10. The image forming apparatus according to  
claim 1, said setting section sets a compression rate  
20 and a compression method, and compression or expansion  
of the image data is performed on the basis of the  
compression rate and the compression method.